

Urban development at Tell Tweini

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The countryside

The Jebbleh plain¹ occupies a strategic position between the Northern and Southern Levantine urban centres. Settlement on this fertile coastal plain began to follow a dendritic, or more precisely synaptic pattern from at least the late Early Bronze Age. The region was densely settled during the Middle and Late Bronze Ages according to this model, with the major sites on strategic (i.e. raised, as tells) locations next to the rivers that communicated to the sea at one end and the agricultural heartland to the other, with the urban centre more or less in the middle. Only after the early Iron Age, around the 7th-6th Centuries B.C. did the major centres begin to relocate to the coast – perhaps in response to silting in river deltas and estuaries resulting from climate change induced erosion.

In looking for the coastal port facilities of the Middle and Late Bronze Ages one should consider that through time sedimentation has obscured most of the ancient natural bays. These natural anchorages, protected by promontories, underwater ridges and small islands, would have sheltered these harbours.² We may thus expect there to have been ports along the coast at fairly regular intervals, offering traders various places to stop and conduct commercial activities. The effects of this maritime trade can be traced by the circulation of the traded goods. This distribution of artefacts is well documented in the material remains at Tell Tweini, such as the Cypriot ceramics of the 2nd and 1st millennium B.C. that are found in several funerary contexts and both public and private houses. It confirms the site of Tell Tweini played a key role in this economic system thanks to its link with the sea and its geographical position inland. It should be noted that, although the general debate continues on the viability of the old rivers³, the Rumeileh, to the West of Tell Tweini, was still navigable at the beginning of the 20th century AD.

The city

Based on the most recent archaeological data, Tell Tweini developed as an urban centre starting in the latter part of the Early Bronze Age. The vast majority of the excavated structures however date to the Iron Age. They give a reliable insight into the town planning of the city of the 9th-6th centuries BC (Levels VI-V).

1. Riis P. J., Thuesen I., Lund J. and Riis T. (eds.) *Topographical Studies in the Gabla Plain* (Publications of the Carlsberg Expedition to Phoenicia 13), Viborg 2004.

2. Marriner N., Paléo-environnements des Ports Antiques de Tyr, Sidon et Beyrouth, in: *Archaeology and History in Lebanon* 28, 2008, 66-138.

3. Al-Maqdissi M., Bretschneider J., Degryse P., Hameeuw H., Kaniewski D., Paulissen E., Van Simaey S. and Van Lerberghe K., Environmental changes in the Jebbleh plain (Syria), Geophysical, Geomorphological, Palynological, Archaeological and Historical Research, *Res Antiquae* 4, 2007, p. 3-10.

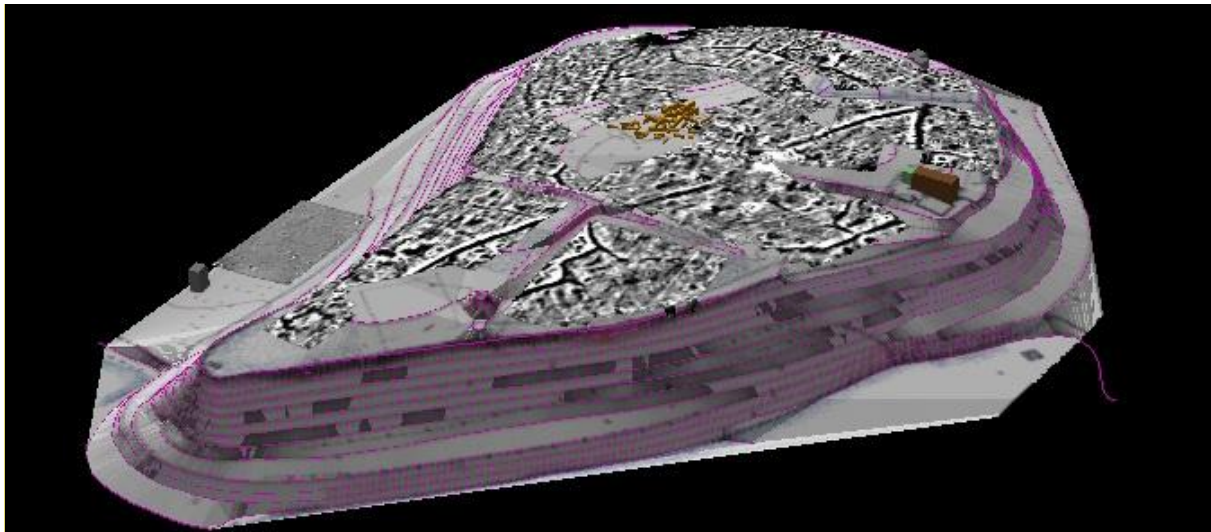
During the 2004 campaign, a geophysical survey was carried out in order to locate architectural remains and to place the already excavated areas in a broader urban context (Ill. 1-2). While both radar penetration and geomagnetic research were attempted, the latter proved to be the superior method for this type of top soil. The geomagnetic results show the ground plan of the city as it was during the 9th and 6th centuries BC and could be joined with the previously excavated structures of the Iron Age. Several large structures (perhaps public) are prevalent on the plan. Based on these results two rectangular buildings located at the centre of the tell were excavated during the 2006-2007 campaigns on Field A and another was studied on the western limit of Field B. Beside these large structures densely urbanized city quarters are observable.

The street system of the Iron Age city had two primary orientations (Ill. 2-5). From the main entrance of to the city, in the East, a central, axial street runs west, where in Field B it leads to an ancient zone of temples, uncovered during recent excavations. The residential zone in Iron Age II was located in the heart of the city and connected with the central street. One of these residential quarters is currently being excavated in Field A. A subsidiary street running through this quarter was connected to the central artery (Ill. 5-6). The second orientation of the city's road system is orbital, following the contours of the tell and passing along the limits of the highest parts. This 'ring' road crosses the central street twice and encloses the residential city quarters.

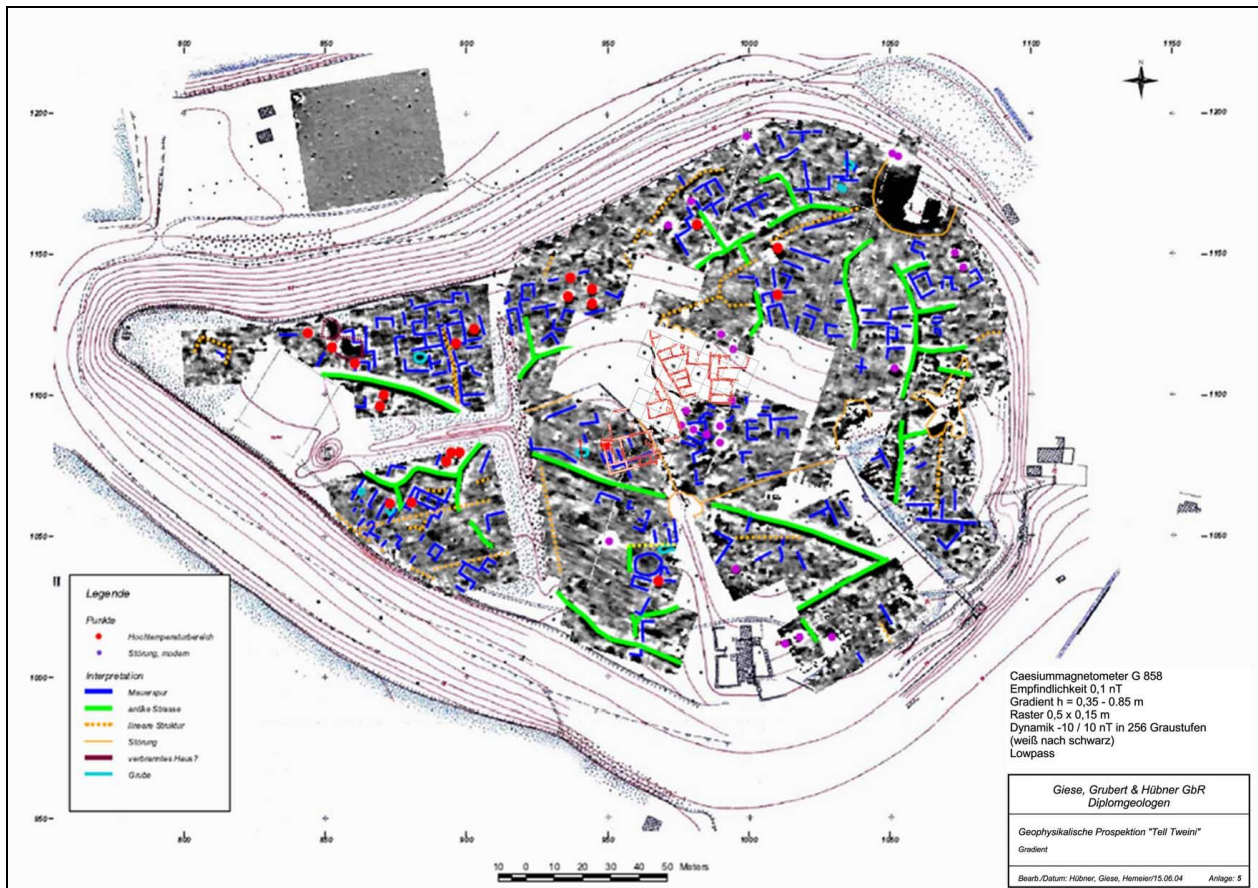
Archaeological surveys on the grounds surrounding Tell Tweini have proven difficult. Modern buildings and intensive agriculture prevent a thorough investigation. An exception are the fields just North and South of the Tell. On the ground to the North the geomagnetic results showed no structures in the top soil. Either ancient structures have been obscured by more recent sediment, or the territory surrounding the tell was not urbanized in antiquity.

For the future a large survey program is planned by the Syrian Department of Antiquities. The project will investigate the entire Gibala plain and greatly help us to understand the patterns of urbanisation in the region.

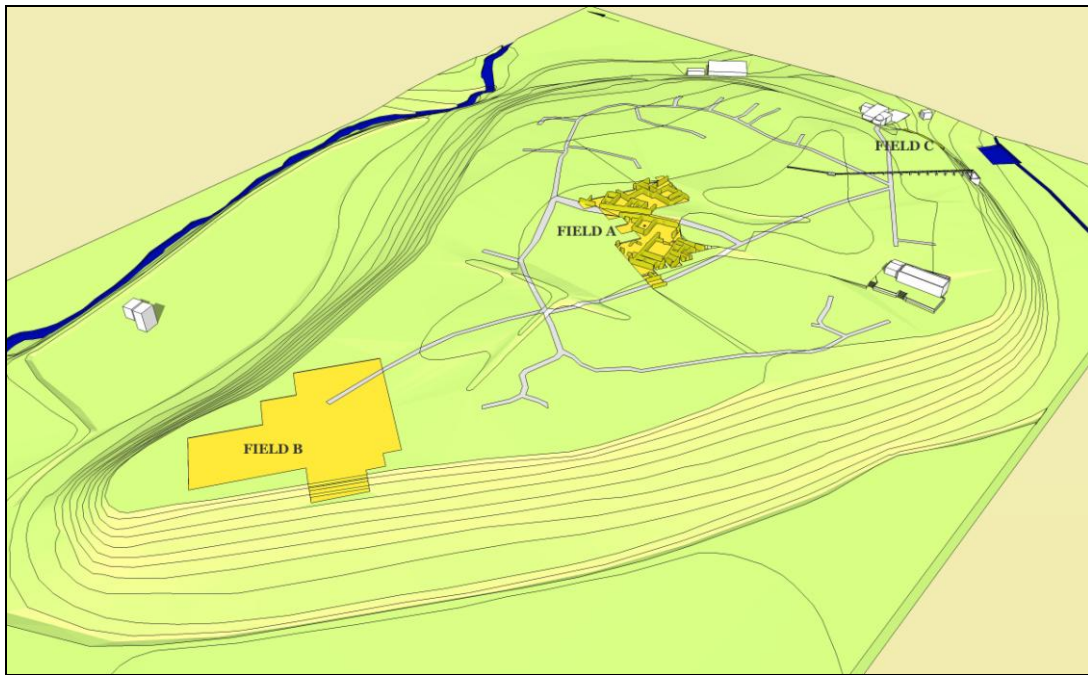
URBAN DEVELOPMENT AT TELL TWEINI



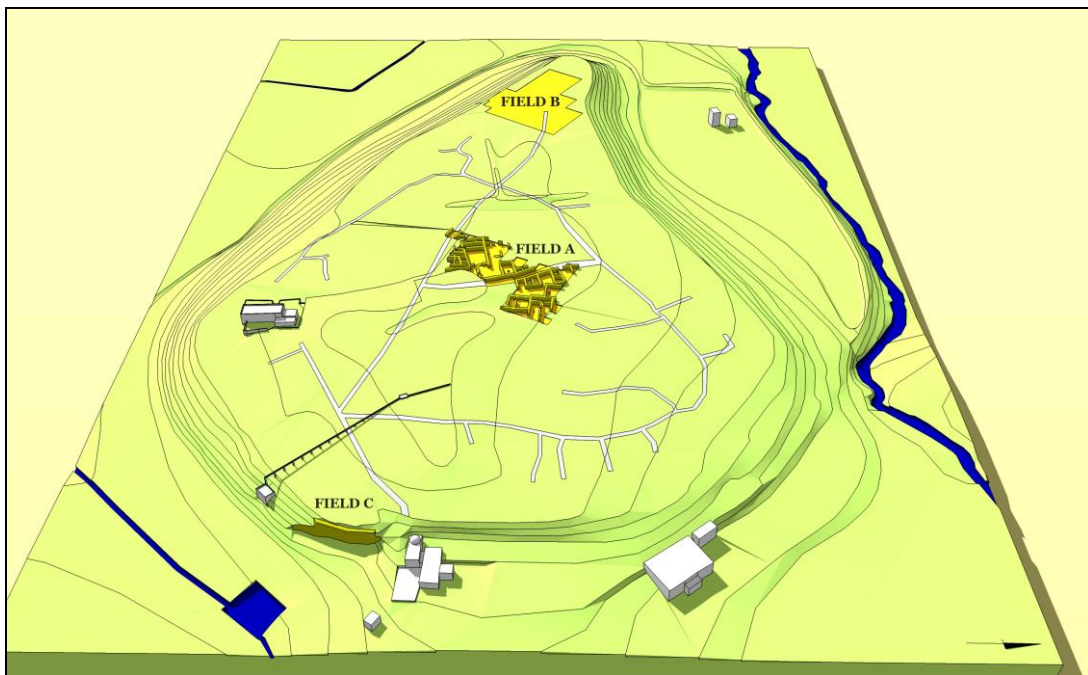
III. 1. Results of the geophysical survey of 2004



III. 2. Results and interpretation of the geophysical survey of 2004

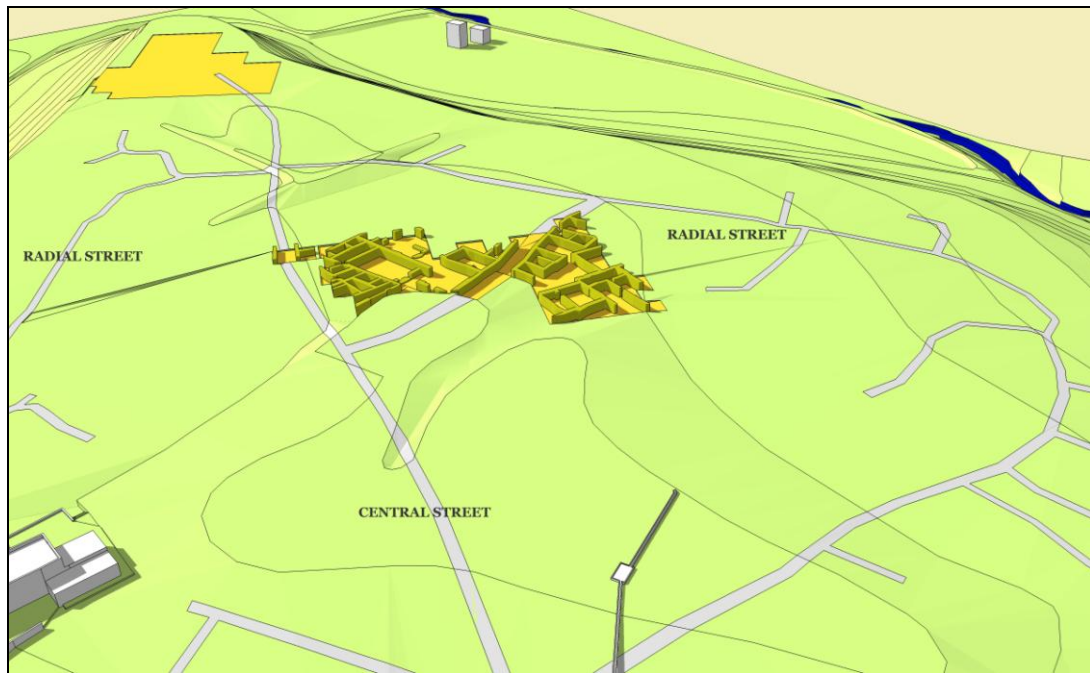


III. 3. Virtual animation, general impression, situation of the Iron Age II, view towards the North-East
(realisation B. Bortolin & H. Hameeuw)

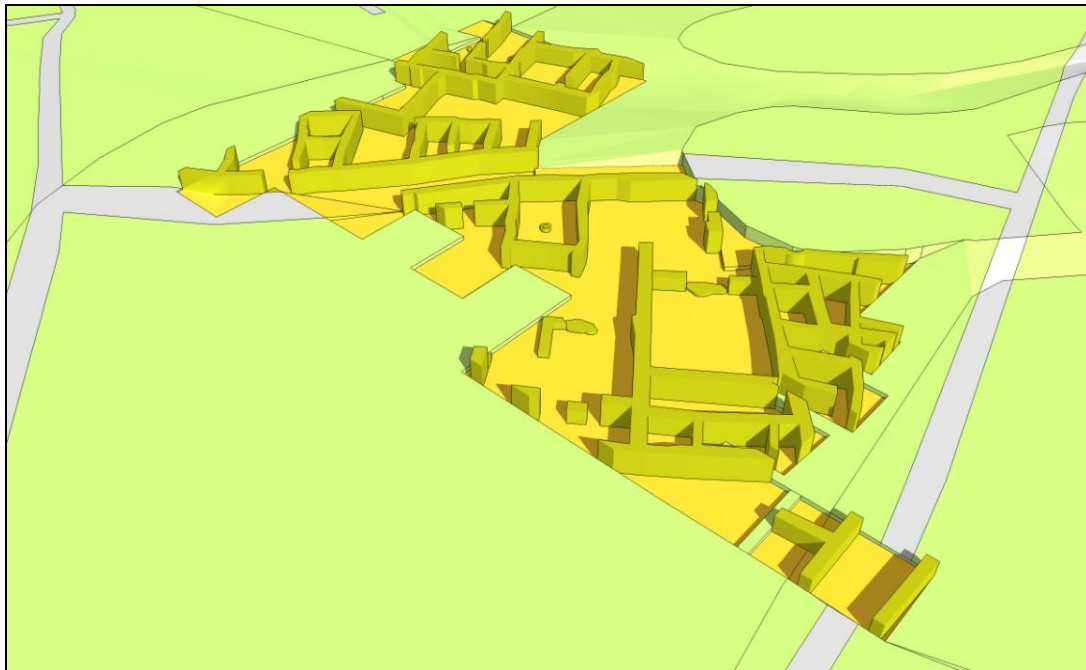


III. 4. Virtual animation, general impression, situation of the Iron Age II, view towards the West (realisation B. Bortolin & H. Hameeuw)

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Ill. 5. Virtual animation, detail, situation of the Iron Age II, view towards the North-West
(realisation B. Bortolin & H. Hameeuw)



Ill. 6. Virtual animation, detail, Field A, situation of the Iron Age II, view towards the East
(realisation B. Bortolin & H. Hameeuw)